

## 1. Introduction

GDS Delivery Version: **C7.4.0**     Initial Delivery     Redelivery    ICA #: 10320

Spacecraft:     MGS     M98 Orbiter     M98 Lander     Stardust     Other [\_\_\_\_]

Type:             Block Updates             Utilities     Command Dictionary  
                    Modeling Updates             Other [\_\_\_\_]

Notice: Times Below were decided at the Change Board.

Installation Window: \_\_\_\_\_  
 Best Times to Install: \_\_\_\_\_  
 Freeze Times: \_\_\_\_\_

## MCR's

337 - SDU Command Dictionary and Flight Rules update & Automation script updates

1) Delivery of Stardust 4.0.1 CDL (refer to A. Chevront, "Stardust CDL 4.0.1 Delivery", Jan 10, 1999, V. Wang, "Stardust\_cdl\_4.0.1 delivery", Jan 11, 1999 E-Mails)

2) An update to Stardust context variable file due to duplicate flight software object id names (refer to A. Chevront, "SD Object Definitions", Jan 11, 1999, V. Wang "new stardust cvf", Jan 12, 1999 E-Mails)

3) An update to SD.init.smf so that at initial acquisition, channel 23 appears instead of channel 25 in the sequence products (refer to A. MeMechen, "sboost.037 Comments", Jan 8, 1999 E-Mail)

4) Delivery of updated spacecraft model file (Stardust.4.0.1a.smf)

5) Delivery of an updated flight/mission rules file (Stardust.A4.fmrf)

6) Delivery of updated automation scripts

add_nipcec_to_pdb	ASP automation script	Turn off script debugging
check_file_sfd	ASP/Manual FIS interface script	Performance enhancement
file_load	ASP/Manual File-Load automation script	Add check for filename > 40 characters
get_aero_symin.awk	ASP aerobrake drag pass seqtran symin determination	Fix for orbit number >= 1000
get_sfd_header	ASP/Manual FIS interface script	Performance enhancement
notify_act	ASP/Manual ACT interface	Updates for manual sequence generation
notify_sie	ASP sie notification script	New, automatically notifies SIE via e-mail
pdb_interface	ASP/Manual FIS interface script	Performance enhancement
pdb_store	Manual FIS interface script	Fixes GCMD to DOM for MSP 98
process_frfs.awk	ASP automation script	Aerobrake drag pass performance improvement
run.nipcec.sequence	ASP automation script	Upgrade performance statistics gathering
run_file_load	ASP File-Load automation script	Updates for notify_act interface
run_fns	ASP radiation log script	Updates for block update log
run_sasf	ASP automation script	Updates for notify_act interface
send_report	ASP automation script	Updates for notify_sie
start_auto_sequence	ASP automation script	Fixes determination of latest seq_id upon start-up

store_file	ASP/Manual FIS interface script	Performance enhancement
write_to_block_log.awk	ASP File-Load automation script	Updates for block update log

2. Delivery Location: **mgcm1:/staging/MSOP/seq**  **doc/** (directory)  **tarfiles/** (directory)

3. SEQ Workstations - Installation Instructions:  ( See Attached - Directory Listing)

a) Special Alerts - Before Install

Notify S/W Dev:  J. Morris (4-1069)  S. Wissler (4-0153) &  SIE on Duty

Comments:

b) Install - Tar file: **C7.4.0-SEQ-000-SEQ\*** in subdirectory: /msop/seq/

On: PST workstations

- 1) copy the tarfile: **C7.4.0-SEQ-000-SEQ\_software.tar** - to subdirectory: /msop
- 2) tar -xvf **C7.4.0-SEQ-000-SEQ\_software.tar**
- 3) rm **C7.4.0-SEQ-000-SEQ\_software.tar**
- 4) copy the tarfile: **C7.4.0-SEQ-000-SEQ\_adapt.tar** - to subdirectory: /msop
- 5) tar -xvf **C7.4.0-SEQ-000-SEQ\_adapt.tar**
- 6) rm **C7.4.0-SEQ-000-SEQ\_adapt.tar**

Comments:

c) Notify:  J. Morris (4-1069)  S. Wissler (4-0153)  Linda Lee (3-9568), when Install is completed.

1) Software Dev will configure /msop/seq\_data and other areas

- verify software installed correctly
- run test cases

2) Software Dev will Notify:  SIE on Duty  CM when configuration is completed.

Special - User's - Alerts - After Install:

Log off workstation - then Log back on (files need to be re-configured)

Comments:

4. SCT Workstations - Installation Instructions:  ( See Attached - Directory Listing)

a) Special Alerts - Before Install

Comments:

b) Install Tar file: **C7.4.0-SEQ-000-SEQ\*** in /msop/seq

On:  LMA SCT SERVER  LMA STL Workstations  SD MSA

- 7) copy the tarfile: **C7.4.0-SEQ-000-SEQ\_software.tar** - to subdirectory: /msop
- 8) tar -xvf **C7.4.0-SEQ-000-SEQ\_software.tar**
- 9) rm **C7.4.0-SEQ-000-SEQ\_software.tar**
  
- 10) copy the tarfile: **C7.4.0-SEQ-000-SEQ\_adapt.tar** - to subdirectory: /msop
- 11) tar -xvf **C7.4.0-SEQ-000-SEQ\_adapt.tar**
- 12) rm **C7.4.0-SEQ-000-SEQ\_adapt.tar**

Comments:

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c) Notify:  J. Morris (4-1069)  S. Wissler (4-0153)  Linda Lee (3-9568),  
when Install is completed.

1) Software Dev will configure /msop/seq\_data and other areas

- verify software installed correctly
- run test cases

2) Software Dev will Notify:  ACE  CM - when configuration is completed.

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Special - User's - Alerts - After Install:

Log off workstation - then Log back on (files need to be re-configured)

Comments:

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5.0

This form will be placed on our homepage, in the following URL: [http://mgsw3.jpl.nasa.gov/seq/seq\\_dev/](http://mgsw3.jpl.nasa.gov/seq/seq_dev/)

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## **Test Report**

All Stardust block test cases have been run. The sequence products have been quickly reviewed and there were no differences (from compares of the PEFs).

Ran the following ASP tests:

Drag Pass	p605a
File Load	c02alrv_ephvg_sun_ecr_01.cfg
Interactive Command	scnoop_95_test

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**Directory Listing: C7.4.0-SEQ-000-SEQ\_software.tar**

```
drwxrwxr-x 271/248      0 Jan  5 18:56 1999 seq/
drwxrwxr-x 271/248      0 Jan 25 15:20 1999 seq/bin/
-rwxrwxr-x 271/248    8349 Jan 13 15:25 1999 seq/bin/pdb_store
-rwxrwxr-x 271/248   16879 Jan 21 16:24 1999 seq/bin/notify_act
-rwxrwxr-x 271/248    5105 Jan  5 16:31 1999 seq/bin/start_auto_sequence
-rwxrwxr-x 271/248    2927 Dec 29 15:33 1998 seq/bin/store_file
-rwxrwxr-x 271/248    7338 Jan  5 18:54 1999 seq/bin/check_file_sfdu
-rwxrwxr-x 271/248    1254 Dec 29 15:41 1998 seq/bin/pdb_interface
-rwxrwxr-x 271/248     397 Dec 29 17:17 1998 seq/bin/get_sfdu_header
-rwxrwxr-x 271/248   11011 Jan  5 19:20 1999 seq/bin/run_sasf
-rw-rwxr-- 271/248    1944 Jan  5 16:29 1999 seq/bin/process_frfs.awk
-rwxr-xr-x 271/248    3151 Jan  5 18:48 1999 seq/bin/add_nipcec_to_pdb
-rwxrwxr-x 271/248    5056 Jan  5 18:52 1999 seq/bin/run_nipcec.sequence
-rwxrwxr-x 271/248    4048 Jan 22 22:03 1999 seq/bin/run_fns
-rw-rwxr-- 271/248     600 Jan  5 20:46 1999 seq/bin/get_aero_symin.awk
-rw-rw-r-- 271/248     77 Jan  6 17:07 1999 seq/bin/write_to_block_log.awk
-rwxrwxr-x 271/248     521 Jan  6 20:50 1999 seq/bin/notify_sie
-rwxrwxr-x 271/248     863 Jan  6 20:52 1999 seq/bin/send_report
-rwxrwxr-x 271/248   12847 Jan  7 20:17 1999 seq/bin/env_gen
-rwxrwxr-x 271/248    4932 Jan  7 20:31 1999 seq/bin/seq_translate
-rwxrwxr-x 271/248   16032 Jan 22 15:48 1999 seq/bin/file_load
-rwxrwxr-x 271/248    6692 Jan 25 15:19 1999 seq/bin/run_file_load
```

**Directory Listing: C7.4.0-SEQ-000-SEQ\_adapt.tar**

```
drwxr-xr-x 2800/85      0 Jan 21 19:12 1999 seq/
drwxr-xr-x 2800/85      0 Jan 22 18:31 1999 seq/bin/
-rwxrwxr-x 2800/85    1598 Jan 21 18:54 1999 seq/bin/sdu-seq-adapt-setup
-rwxrwxr-x 2800/85    3089 Jan 22 18:31 1999 seq/bin/msop-seq-setup
drwxr-xr-x 2800/85      0 Jan 21 16:42 1999 seq/cdl/
-rw-rw-r-- 2800/85   160938 Jan 11 18:24 1999 seq/cdl/Stardust_cdl_4.0.1
drwxr-xr-x 2800/85      0 Jan 21 16:49 1999 seq/cmdxlt/
-rw-rw-r-- 2800/85   103830 Jan 11 18:29 1999 seq/cmdxlt/Stardust_cdl_4.0.1.xlt
drwxr-xr-x 2800/85      0 Jan 21 18:00 1999 seq/cvf/
-rw-rw-r-- 2800/85    15933 Jan 20 19:19 1999 seq/cvf/Stardust.A18.cvf
drwxr-xr-x 2800/85      0 Jan 21 19:08 1999 seq/smf/
-rw-rw-r-- 2800/85   313483 Jan 21 18:44 1999 seq/smf/Stardust.4.0.1a.smf
drwxr-xr-x 2800/85      0 Jan 21 19:13 1999 seq/fmrf/
-rw-rw-r-- 2800/85    10065 Jan 21 18:44 1999 seq/fmrf/Stardust.A4.fmrf
```